



**REVOCATION  
AND  
GENERAL POWER OF ATTORNEY**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The undersigned is an empowered representative of the Assignee and hereby appoints the registrants of Knobbe, Martens, Olson & Bear, LLP, **Customer No. 20,995**, as attorneys and agents to represent the Assignee before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned to the Assignee according to the USPTO assignment records or assignment documents supplied with an accompanying Statement Under 37 CFR § 3.73(b). This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 CFR § 3.71.

All previous powers of attorney for the below named Assignee are hereby revoked.

A Statement Under 37 CFR § 3.73(b), signed by a registrant of Knobbe, Martens, Olson & Bear, LLP, is attached setting forth a full chain of title for the subject application owned by the Assignee named below.

Please recognize or change the correspondence address for the above-identified application to **Customer No. 20,995**.

By:

Name: Menso Hendriks

Date:

May 24, 2004  
Title: Central IP Officer

Assignee: ASM INTERNATIONAL N.V.

Address: Jan van Eycklaan 10

3723 BC Bilthoven

THE NETHERLANDS



IMEC182.001C1C1

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Satta et al. )  
App. No. : 10/731,656 )  
Filed : December 8, 2003 )  
For : METHOD FOR BOTTOMLESS )  
DEPOSITION OF BARRIER LAYERS )  
IN INTEGRATED CIRCUIT )  
METALLIZATION SCHEMES )  
Examiner : David Nhu

ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION  
AND  
REVOCATION AND POWER OF ATTORNEY

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee"). An assignment from the Inventors to ASM America, Inc. is recorded at Reel 011397 and Frame 0805. A subsequent assignment from ASM America, Inc. to the Assignee was submitted to the Assignment Branch of the Patent and Trademark Office on January 16, 2004. A copy of the documents as filed is attached. This represents the entire chain of title of this invention from the Inventors to the Assignee.

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

App. No. : 10/731,656  
Filed : December 8, 2003

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the registrants of Knobbe, Martens, Olson & Bear, LLP, 2040 Main Street, Fourteenth Floor, Irvine, California 92614, Telephone (949) 760-0404, **Customer No. 20,995**, as its attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

Please use **Customer No. 20,995** for all communications.

Interuniversitair MicroElectronica Centrum VZW  
(IMEC)

Dated: August 11, 2004

By:   
Print Name:

Title: **Prof. Gilbert DECLERCK**  
*President*

Address: Kapeldreef 75  
B-3001 Leuven  
BELGIUM

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081004

UTILITY/DESIGN PATENT  
(document recordation / IDS)

Date: 1/16/04

Rec'd in the USPTO on the date stamped hereon via Certificate of Mail:

Docket #: IMEC182.001 CI/CIC/AVS Applicant: Satta et al.

Title: Method for bottomless suspension of a member

App No.: 10/731,656, 6,664, 193, 6, 391, 7 Filed: 5

Exr: \_\_\_\_\_ Art Unit: \_\_\_\_\_

Class/Sub-Class: \_\_\_\_\_ Re-Exam No.: \_\_\_\_\_

VERIFIED BY: Asst: APOM Atty: amr QC: QAM

- ☐ Transmittal Letter  
☐ Information Disclosure Statement in \_\_\_\_\_ pgs  
☐ Form PTO-1449 in \_\_\_\_\_ pgs ☐ Reference(s)  
☐ \$180 Check for IDS  
☒ Recordation Form Cover Sheet  
☒ Assignment in 2 pgs ☒ \$ 120 Check for Recordation  
☐ \_\_\_\_\_ for Recordation in \_\_\_\_\_ pgs  
☐ \_\_\_\_\_  
☒ Return Prepaid Postcard

(9/17/02)

FILE COPY

KNOBBE MARTENS OLSON, & BEAR

PATENT ACCOUNT  
2040 MAIN STREET, 14TH FL.  
IRVINE, CA 92614

11527

DATE 1/13/04

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1210

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one hundred twenty -

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www.wellsfargo.com

FOR IMEC182.001 CI/CIC/AVS; Assignment

APOM

⑈011527⑈ +⑈121000248⑈4159335140⑈

RECORDATION FORM COVER SHEET  
PATENTS ONLY

TO THE ASSISTANT COMMISSIONER FOR PATENTS: Please record the attached original documents or copy thereof.

1. Name of conveying party: (If multiple assignors, list numerically)

ASM America, Inc.

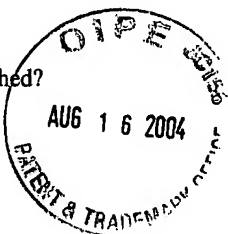
Additional name(s) of conveying party attached?

☐ Yes ☒ No

2. Name and address of receiving parties:

Name: Interuniversitair MicroElectronica Centrum VZW  
(IMEC)Internal Address: Kapeldreef 75, 3001  
Leuven, Belgium

Additional name(s) of receiving party(ies) attached?

☒ Yes ☐ No

3. Nature of conveyance:

☒ Assignment  
☐ Merger  
☐ Security Agreement  
☐ Change of Name  
☐ Other:

Execution Date: (If multiple assignors, list execution dates in numerical order corresponding to numbers indicated in 1 above) January 14, 2004

4. Application numbers or Patent numbers:

☒ Patent Application No.: 10/731,656  
Filing Date: December 8, 2003☒ Patent No.: 6,664,192  
Issue Date: December 16, 2003☒ Patent No.: 6,391,785  
Issue Date: May 21, 2002Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Andrew N. Merickel  
KNOBBE, MARTENS, OLSON & BEAR, LLP  
Customer No. 20,995

Internal Address: Fourteenth Floor

Street Address: 2040 Main Street

City: Irvine State: CA ZIP: 92614

Attorney's Docket No.: IMEC182.001AUS

7. Total fee (37 CFR 1.21(h)): \$120

☒ Enclosed☒ Authorized to be charged to deposit account if any additional fees are required, or to credit any overpayment

8. Deposit account number: 11-1410

Please charge this account for any additional fees which may be required, or credit any overpayment to this account.

6. Total number of applications and patents involved: 3

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct, and any attached copy is a true copy of the original document.

Andrew N. Merickel

Name of Person Signing

Signature

Date

53,317

Registration No.

Total number of pages including cover sheet, attachments and document: 4

Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services  
Director, U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

2. Name and address of receiving party(id

**Name:** ASM International NV

**Internal Address:** Jan Van Eycklaan 10, 3723BC  
Bilthoven, The Netherlands

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122203

### ASSIGNMENT

WHEREAS, ASM America, Inc., a U.S. corporation having offices at 3440 University Drive, Phoenix, AZ 85034-7200 (hereinafter "ASSIGNOR"), represents and warrants that it is the assignee of record for certain new and useful improvements disclosed in the following United States issued Letters Patents and pending applications in the United States (hereinafter "the Patents"):

<u>Patent No.</u> 6,391,785	<u>Issue Date</u> May 21, 2002	<u>Title</u> METHOD OF BOTTOMLESS DEPOSITION OF BARRIER LAYERS IN INTEGRATED CIRCUIT METALLIZATION SCHEMES
<u>Application No.</u> 10/123,492	<u>Filing Date</u> April 15, 2002	<u>Title</u> METHOD OF BOTTOMLESS DEPOSITION OF BARRIER LAYERS IN INTEGRATED CIRCUIT METALLIZATION SCHEMES

WHEREAS, Interuniversitair MicroElectronica Centrum VZW (IMEC), a Belgium corporation having offices at Kapeldreef 75, 3001 Leuven, Belgium, and ASM International NV, a Netherlands corporation having offices at Jan Van Eycklaan 10, 3723BC Bilthoven, the Netherlands (hereinafter "ASSIGNEES") desire to purchase the entire right, title, and interest in and to the inventions disclosed in the Patents;

NOW, THEREFORE, in return for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby further acknowledges that it has sold, assigned, and transferred, and by these presents does hereby sell, assign, and transfer, unto ASSIGNEES, their successors, legal representatives, and assigns, any right, title, and interest throughout the world in, to, and under the said improvements, and the said Patents and all Patents that may be granted thereon, and all provisional applications relating thereto, and all divisions, continuations, reissues, reexaminations, renewals, and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent that may hereafter be filed for said improvements or for the said Patents in any country or countries foreign to the United States; and ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements and all Letters Patents resulting from the Patents to ASSIGNEES, their successors, legal representatives, and assigns, in accordance with the terms of this Agreement.

ASSIGNOR does hereby sell, assign, transfer, and convey to ASSIGNEES, their successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEES, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of the said issued Letters Patents;

ASSIGNOR hereby covenants and agrees that it will communicate to ASSIGNEES, their successors, legal representatives, and assigns any facts known to ASSIGNOR respecting the Patents immediately upon becoming aware of those facts, and that it will testify in any legal proceeding involving any of the Patents, will sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths, and will generally do everything possible to aid ASSIGNEES, their successors, legal representatives, and assigns to obtain and enforce the Patents in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 14th day of January, 2009

Todd Westersund  
ASM America, Inc.

By: Todd Westersund

Name Printed: \_\_\_\_\_

Title: Intellectual Property Officer

Date: January 14, 2009

STATE OF \_\_\_\_\_

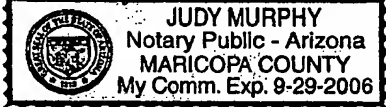
COUNTY OF \_\_\_\_\_

ss.

On January 14, 2009, before me, Judy Murphy, personally appeared personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

[SEAL]



Judy Murphy  
Notary Signature